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January 29, 2008

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Re: Petitions for Rulemaking and Clarification Regarding the Commission's Rules  
Applicable to Retirement of Copper Loops and Subloops – RM-11358

Dear Ms. Dortch:

Yesterday, Kevin Sheehan, President and CEO of Hatteras Networks, Inc. and I met with the Commissioners' Legal Advisors and staff of the Wireline Competition Bureau. In particular, we met with John Hunter from Commissioner McDowell's Office, Scott Deutchman from Commissioner Copps' Office, Ian Dillner from Chairman Martin's Office, Scott Bergmann from Commissioner Adelstein's Office, Chris Moore from Commissioner Tate's Office, and William Kehoe, Matt Warner, Tim Stelzig, Jeremy Miller, Bill Dever, Jon Reel and Chris Riley from the Wireline Competition Bureau.

The purpose of the meetings was to discuss the current state of technology with regard to Mid-Band Ethernet provided over bonded copper pairs and industry developments concerning that technology. The attached slides were used to address these subjects. Because the discussions touched on the subject of an open proceeding concerning the retirement of copper plant, in accordance with Section 1.1206 of the Commission's Rules a copy of this notice is being filed via the Electronic Comment Filing System in the docket for the above-captioned proceeding. Please contact the undersigned if you have any questions with regard to this matter.

Sincerely,

/s/

Stephen L. Goodman

Counsel for Hatteras Networks, Inc.

# **Mid-Band Ethernet Leveraging Copper, A National Treasure**

**Kevin Sheehan  
President and CEO**

## To Do List for the Next 15 Minutes



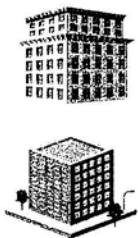
- ✓ Update on technology innovation to leverage copper infrastructure
- ✓ Copper retirement
- ✓ Mobile-backhaul solutions
- ✓ How to speed broadband deployment and promote competition

# Large Service Gap In Access Network

- Historical view was that traditional T1-based access would be replaced with fiber
- However, while fiber deployment has accelerated, the bottom line is very little change in T1 infrastructure in the past five years

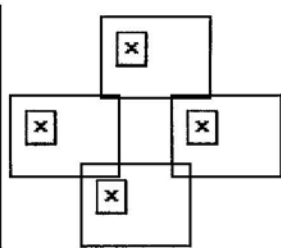


Ethernet rules the LAN



*Even wireless solutions are Ethernet based*

Ethernet rules the core



*Lower CapEx  
Lower OpEx*

All Content is connected via Ethernet

Google

YAHOO!

myspace.com.  
a place for friends



# The Market Facts are Compelling

## *Just the Facts....*

- 87% of businesses do not have access to fiber
- 70% of fiber-based Metro-Ethernet services are at 10Mbps
- 10Mbps services are the fastest growing market segment
- Copper pairs are available
- Products are proven

### **Popular Ethernet services:**

- Transparent LAN Services (TLS)
- Direct Internet Access (DIA)
- Ethernet Private Line
- Voice and Data Convergence

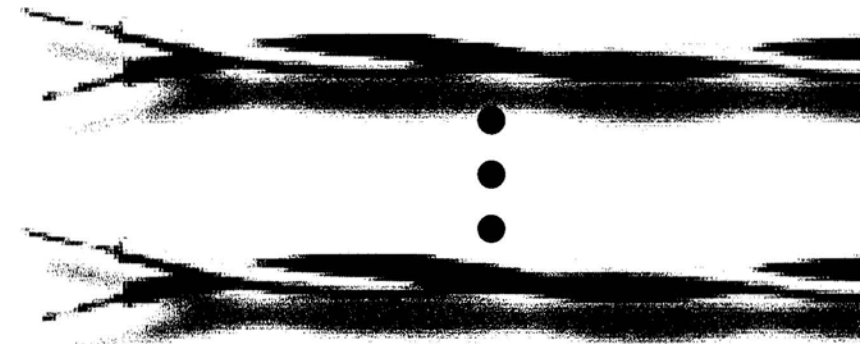


# More Bandwidth from Existing Facilities



## Legacy T1

2 Pair: Delivers 1.5 Mbps



## 2BASE-TL

## Mid-Band Ethernet

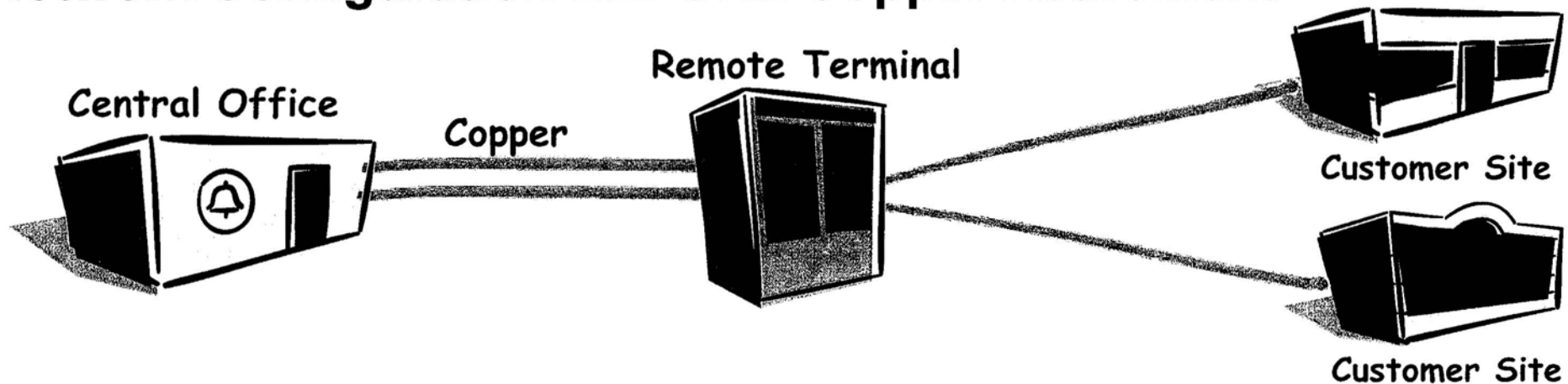
Delivers 5.7 Mbps per pair

2 Pair: Delivers 11.4 Mbps

8 Pair: Delivers 45 Mbps

*Over 7x more bandwidth  
AND much greater reliability*

## Network Configuration BEFORE Copper Retirement

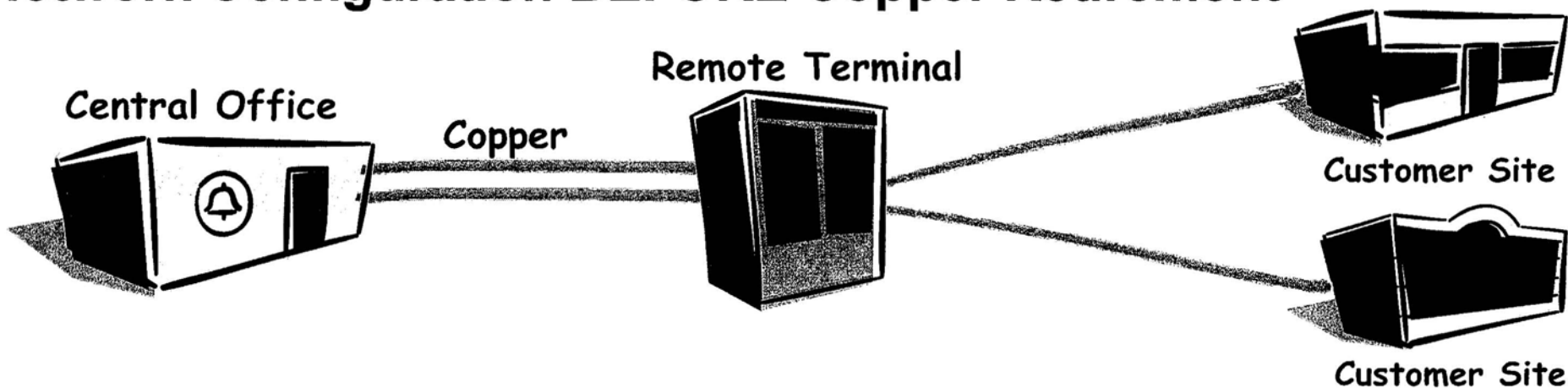


- **Several types of copper retirement**
- **We will focus on how this affects business applications today**

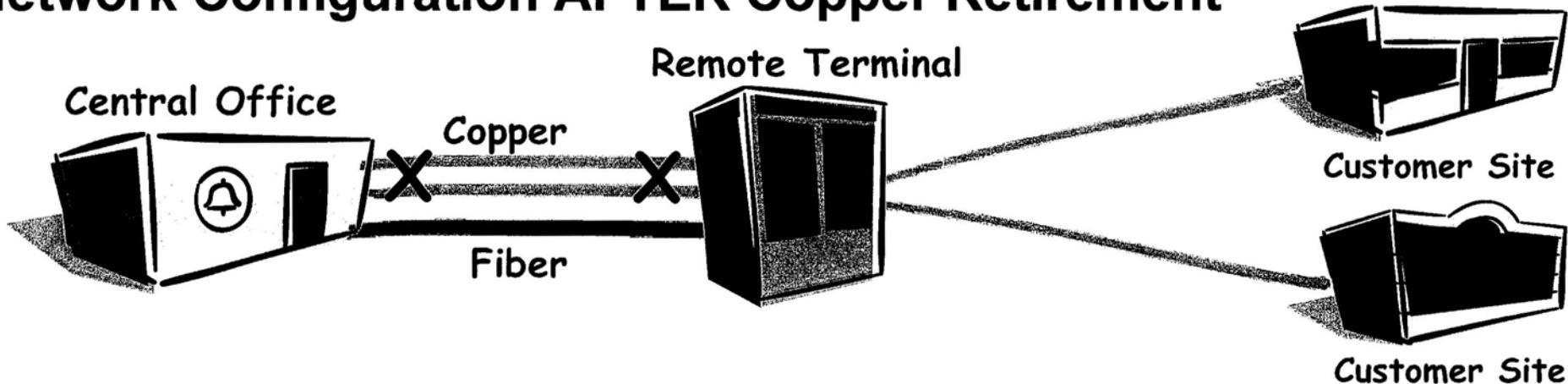


## Simple Copper Retirement Example

### Network Configuration BEFORE Copper Retirement

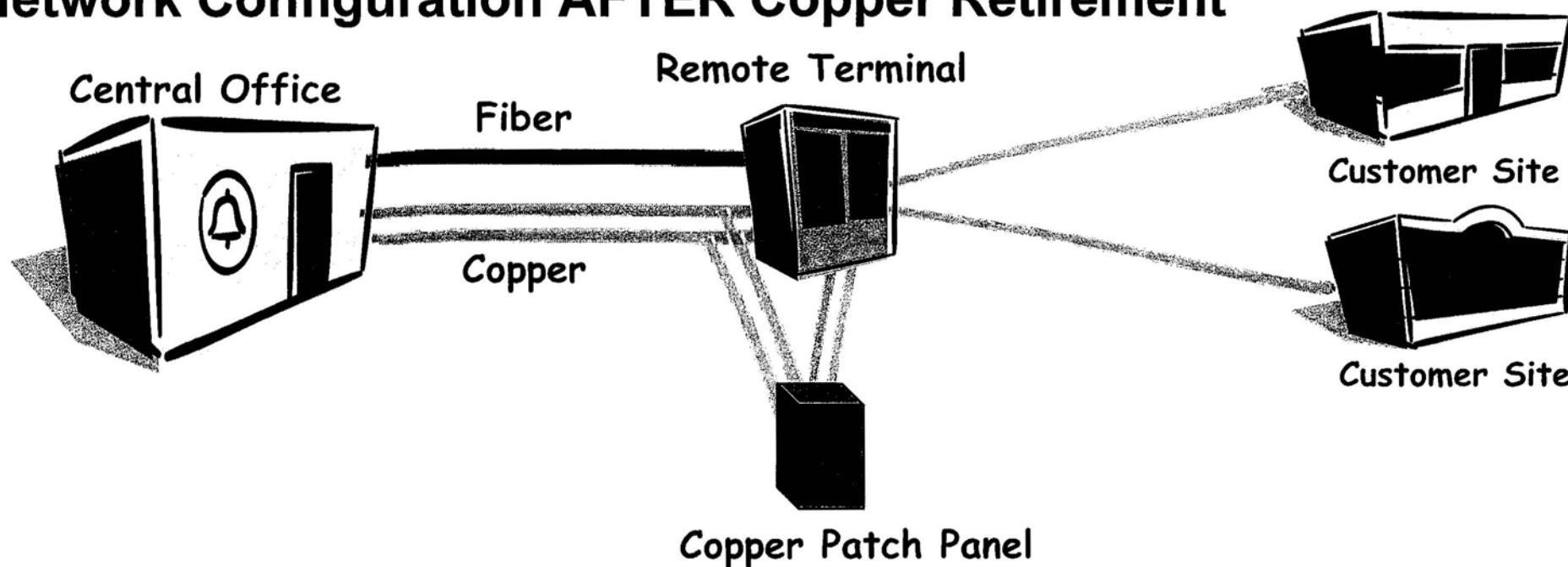


### Network Configuration AFTER Copper Retirement





## Network Configuration AFTER Copper Retirement



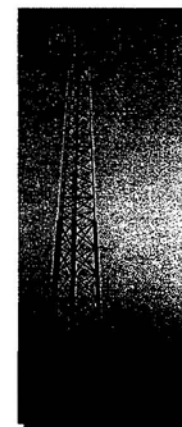
- Add an old fashioned Copper Cross Connect
- No reason to abandon the copper
- Allows competitive carriers to continue serving users from the CO

# Today's Backhaul Is Copper (T1s)



**Bandwidth Hog**

**Bandwidth is a problem for business customers, and the same T1 foundation that frustrates business customers powers our mobile backhaul**



- **Over 90% of US Mobile Backhaul are T1s**
  - ▶ Mobile Carrier must lease facilities from Wireline Carriers
  - ▶ Limited competitive options are available (e.g., Microwave)
- **UNE-Ls are not available for Mobile Backhaul**
  - ▶ Incumbent Carriers are slow to upgrade T1s (due to limited / no competition)
- **“Dry copper” should be made available on a common carrier basis**
  - ▶ Enables Mobile Operators to achieve 7X more bandwidth and greater reliability
  - ▶ Ethernet significantly lowers network maintenance cost
  - ▶ Promotes competition

- **Copper pairs are a National Treasure**

- ▶ Copper is already deployed to businesses, schools, financial institutions, and government agencies (e.g., the White House)
- ▶ Innovative standards based copper solutions deliver 7x more bandwidth and greater reliability than T1s
- ▶ 86% of businesses and over 90% of cell towers only have access to copper facilities (T1s)
- ▶ Copper drives revenue to fund fiber deployment

- **What can the FCC do?**

- ▶ Save copper from forced retirement
- ▶ Make copper facilities available on a common carrier basis for competitive carrier services including Mobile Backhaul

**Thank You!**

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